

(FILE 'HOME' ENTERED AT 13:12:39 ON 24 APR 2006)

FILE 'REGISTRY' ENTERED AT 13:12:49 ON 24 APR 2006

FILE 'CAPLUS' ENTERED AT 13:13:25 ON 24 APR 2006  
L1 27 S 375798-26-8/RN

FILE 'STNGUIDE' ENTERED AT 13:13:41 ON 24 APR 2006

FILE 'CAPLUS' ENTERED AT 13:13:49 ON 24 APR 2006

FILE 'STNGUIDE' ENTERED AT 13:13:54 ON 24 APR 2006  
L2 0 S 121901-94-8/RN

FILE 'CAPLUS' ENTERED AT 13:19:47 ON 24 APR 2006  
L3 13 S 121901-94-8/RN

FILE 'STNGUIDE' ENTERED AT 13:19:59 ON 24 APR 2006

FILE 'CAPLUS' ENTERED AT 13:20:07 ON 24 APR 2006

FILE 'STNGUIDE' ENTERED AT 13:20:09 ON 24 APR 2006

FILE 'CAPLUS' ENTERED AT 13:23:01 ON 24 APR 2006  
L4 660 S (96-08-2# OR 744910-84-7# OR 1713-33-3# OR 3626-19-5# OR 4184  
L5 843 S (191901-94-8# OR 805235-99-8# OR 724460-77-9# OR 104558-95-4#  
L6 348 S (409080-92-8# OR 489432-68-0# OR 32760-80-8#)/RN  
L7 850 S (121901-94-8# OR 805235-99-8# OR 724460-77-9# OR 104558-95-4#  
L8 9 S L4 AND (L6 OR L7)  
L9 12832 S ((ENERGY(W)RAY#) OR ULTRAVIOLET OR ELECTRON OR (X(W)RAY#)) (5A  
L10 58657 S PHOTOINITIAT!##### OR PHOTOPOLYMERI!##### OR PHOTOCUR!#####  
L11 2955 S PHOTO(W) (INITIAT!##### OR POLYMERI!##### OR CURE# OR CURABL  
L12 43 S L4 AND (L9 OR L10 OR L11)  
L13 38 S L12 NOT L8

FILE 'STNGUIDE' ENTERED AT 13:42:45 ON 24 APR 2006

FILE 'CAPLUS' ENTERED AT 13:42:51 ON 24 APR 2006

FILE 'STNGUIDE' ENTERED AT 13:42:57 ON 24 APR 2006  
SET SMA OFF

AN 2004:701842 CAPLUS  
DN 141:226380  
ED Entered STN: 27 Aug 2004  
TI Active energy ray curable composition containing epoxy compounds  
IN Sasa, Nobumasa  
PA Konica Minolta Holdings, Inc., Japan  
SO U.S. Pat. Appl. Publ., 30 pp.  
CODEN: USXXCO

DT Patent  
LA English  
IC ICM C08G059-00  
INCL 528406000

CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 42

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004167315	A1	20040826	US 2004-774733	20040209
	JP 2004315778	A2	20041111	JP 2003-200385	20030723
	GB 2400849	A1	20041027	GB 2004-3837	20040220
	JP 2005263811	A2	20050929	JP 2005-145191	20050518
PRAI	JP 2003-45576	A	20030224		
	JP 2003-200385	A	20030723		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004167315	ICM	C08G059-00
	INCL	528406000
	IPCI	C08G0059-00 [ICM,7]
	IPCR	C08G0059-00 [I,A]; C08G0059-00 [I,C]; C08G0059-24 [I,A]; C08G0059-32 [I,A]; C08G0059-68 [I,A]; G03F0007-038 [I,A]; G03F0007-038 [I,C]
	NCL	528/406.000
	ECLA	C08G059/00; C08G059/24; C08G059/32; C08G059/68; C08G059/68F; G03F007/038
JP 2004315778	IPCI	C08G0059-20 [ICM,7]; C08G0065-18 [ICS,7]
	IPCR	C08G0059-00 [I,A]; C08G0059-00 [I,C]; C08G0059-24 [I,A]; C08G0059-32 [I,A]; C08G0059-68 [I,A]; G03F0007-038 [I,A]; G03F0007-038 [I,C]
	FTERM	4J005/AA04; 4J005/AA07; 4J005/BB01; 4J036/AJ09; 4J036/AJ10; 4J036/EA01; 4J036/GA03; 4J036/HA02
GB 2400849	IPCI	C08G0059-20 [ICM,7]; C08G0065-08 [ICS,7]; C08L0063-00 [ICS,7]; C08L0071-00 [ICS,7]; C09D0011-10 [ICS,7]; C09D0163-00 [ICS,7]; C09D0171-00 [ICS,7]
	IPCR	C08G0059-00 [I,A]; C08G0059-00 [I,C]; C08G0059-24 [I,A]; C08G0059-32 [I,A]; C08G0059-68 [I,A]; G03F0007-038 [I,A]; G03F0007-038 [I,C]
	ECLA	C08G059/00; C08G059/24; C08G059/32; C08G059/68; C08G059/68F; G03F007/038
JP 2005263811	IPCI	C07D0303-16 [ICM,7]; C07D0303-27 [ICS,7]; C07D0303-48 [ICS,7]; C07D0407-12 [ICS,7]; C07D0409-12 [ICS,7]; C08G0059-20 [ICS,7]
	IPCR	C07D0303-00 [I,C]; C07D0303-16 [I,A]; C07D0303-27 [I,A]; C07D0303-48 [I,A]; C07D0407-00 [I,C]; C07D0407-12 [I,A]; C07D0409-00 [I,C]; C07D0409-12 [I,A]; C08G0059-00 [I,C]; C08G0059-20 [I,A]
	FTERM	4C048/AA04; 4C048/BB02; 4C048/BC05; 4C048/BC06; 4C048/BC20; 4C048/CC02; 4C048/CC03; 4C048/XX04; 4C063/AA03; 4C063/BB08; 4C063/CC75; 4C063/CC92; 4C063/DD71; 4C063/EE05; 4C063/EE10; 4J036/AJ10; 4J036/FA10; 4J036/GA03; 4J036/HA02; 4J036/JA01; 4J036/JA06

OS MARPAT 141:226380

AB An active energy ray curable composition contains an epoxy compound having at

least one oxirane ring having substituents at positions  $\alpha$  and  $\beta$  of the oxirane ring.

ST epoxy compd photocurable ink

IT Inks

(active energy ray curable composition containing epoxy compds.)

IT Epoxy resins, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(active energy ray curable composition containing epoxy compds.)

IT 744910-08-5P 744910-12-1P 744910-23-4P 744910-32-5P 744910-46-1P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(active energy ray curable composition containing epoxy compds.)

IT 744910-18-7P 744910-27-8P 744910-38-1P 744910-51-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(active energy ray curable composition containing epoxy compds.)

IT 1195-92-2 13492-31-4 30576-84-2 84123-50-2 744910-55-2

744910-68-7 744910-80-3 744910-84-7 744910-88-1  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(active energy ray curable composition containing epoxy compds.)

IT 57-55-6, Propane-1,2-diol, reactions 79-21-0, Peracetic acid 106-89-8, Epichlorohydrin, reactions 108-30-5, Succinic acid anhydride, reactions 504-63-2, Propane-1,3-diol 6493-79-4, Methyl-(4-methyl-3-cyclohexenecarboxylate) 39155-38-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(active energy ray curable composition containing epoxy compds.)

IT 375798-26-8, Solspers 32000

RL: MOA (Modifier or additive use); USES (Uses)

(pigment; active energy ray curable composition containing epoxy compds.)

IT 18934-00-4, OXT 221

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

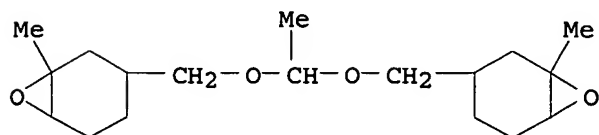
(pigment; active energy ray curable composition containing epoxy compds.)

IT 147-14-8, Copper phthalocyanine 765-12-8, Triethyleneglycol divinyl ether 29829-07-0, CELloxide 2000

RL: TEM (Technical or engineered material use); USES (Uses)

(pigment; active energy ray curable composition containing epoxy compds.)

RN 744910-88-1 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 7-Oxabicyclo[4.1.0]heptane, 3,3'-[ethylidenebis(oxyethylene)]bis[1-methyl- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C18 H30 O4  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

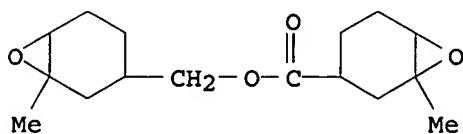


spec. 1 p. 13 (Example Compound 21)  
selected species

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-55-2 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 1-methyl-,  
(1-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methyl ester (9CI) (CA INDEX  
NAME)  
FS 3D CONCORD  
MF C16 H24 O4  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



spec. 11, Example Compound 1

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

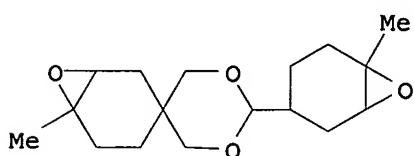
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 103115-57-7 REGISTRY  
ED Entered STN: 04 Jul 1986  
CN Spiro[1,3-dioxane-5,3'-[7]oxabicyclo[4.1.0]heptane], 6'-methyl-2-(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)-, homopolymer (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 7-Oxabicyclo[4.1.0]heptane, spiro[1,3-dioxane-5,3'-[7]oxabicyclo[4.1.0]heptane] deriv.  
MF (C17 H26 O4)x  
CI PMS  
PCT Epoxy resin  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 103115-56-6

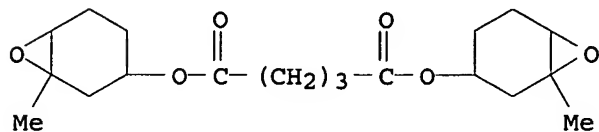
CMF C17 H26 O4



spec. p. 12, Example Compound 4

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-68-7 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN Pentanedioic acid, bis(1-methyl-7-oxabicyclo[4.1.0]hept-3-yl) ester (9CI)  
(CA INDEX NAME)  
FS 3D CONCORD  
MF C19 H28 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

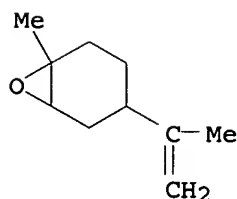


spec., p. 12, Example Compound 7

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 1195-92-2 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(1-methylethenyl)- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN p-Menth-8-ene, 1,2-epoxy- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 1,2-Epoxy-p-menth-8-ene  
 CN 1,2-Epoxy limonene  
 CN Limonene 1,2-epoxide  
 CN Limonene 1,2-oxide  
 CN Limonene epoxide  
 CN Limonene monoxide  
 CN Limonene oxide  
 CN LMO  
 CN NSC 12045  
 FS 3D CONCORD  
 DR 10008-60-3, 98240-20-1, 31326-91-7  
 MF C10 H16 O  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CAOLD,  
 CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHM, CSNB, DDFU,  
 DETHERM\*, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, NAPRALERT,  
 NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)



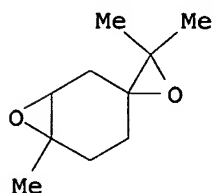
spec., p. 12, (Example Compound 9)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

456 REFERENCES IN FILE CA (1907 TO DATE)  
 27 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 457 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 34 REFERENCES IN FILE CAOLD (PRIOR TO 1967)



RN 30576-84-2 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Spiro[7-oxabicyclo[4.1.0]heptane-3,2'-oxirane], 3',3',6-trimethyl- (9CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN p-Menthane, 1,2:4,8-diepoxy- (8CI)  
OTHER NAMES:  
CN  $\alpha$ -Terpinolene diepoxide  
CN Terpinolene dioxide  
FS 3D CONCORD  
MF C10 H16 O2  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, USPATFULL  
(\*File contains numerically searchable property data)

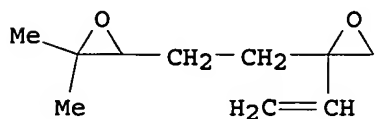


spec., p. 12, Example Compound 11

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 84123-50-2 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Oxirane, 3-[2-(2-ethenyloxiranyl)ethyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Butene, 3,4-epoxy-3-(3,4-epoxy-4-methylpentyl)- (6CI)  
FS 3D CONCORD  
MF C10 H16 O2  
CI COM  
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, USPATFULL  
(\*File contains numerically searchable property data)

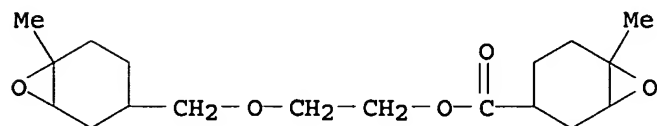


spec. p. 12, Example Compound 12

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

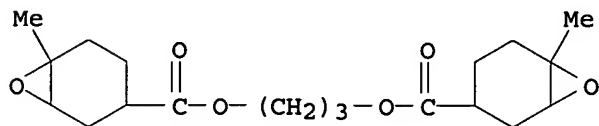
RN 835611-87-5 REGISTRY  
ED Entered STN: 22 Feb 2005  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
2-[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methoxy]ethyl ester (9CI) (CA  
INDEX NAME)  
FS 3D CONCORD  
MF C18 H28 O5  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 835611-91-1 REGISTRY  
ED Entered STN: 22 Feb 2005  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
1,3-propanediyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C19 H28 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

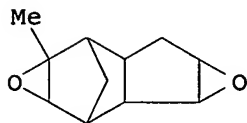


*spec., p. 20, EP-13*

**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

2 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-80-3 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 2,4-Methano-2H-indeno[1,2-b:5,6-b']bisoxirene, octahydro-3a-methyl- (9CI)  
(CA INDEX NAME)  
FS 3D CONCORD  
MF C11 H14 O2  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

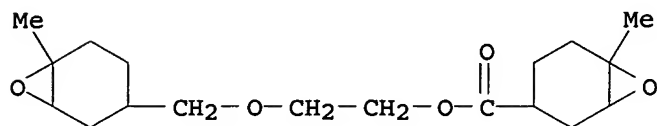


spec., p. 12, Example Compound 16

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 835611-87-5 REGISTRY  
ED Entered STN: 22 Feb 2005  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
2-[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methoxy]ethyl ester (9CI)  
(CA INDEX NAME)  
FS 3D CONCORD  
MF C18 H28 O5  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

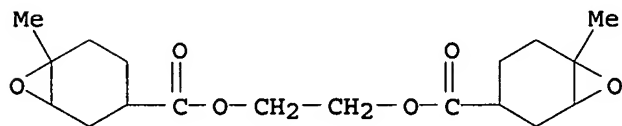


spec. p. 19, EP-2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-08-5 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
1,2-ethanediyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C18 H26 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

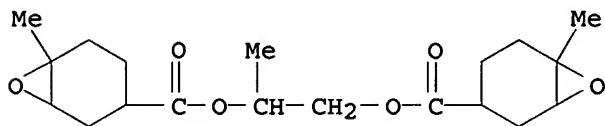


spec. 1 p. 20, (EP-9)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-12-1 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
1-methyl-1,2-ethanediyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C19 H28 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



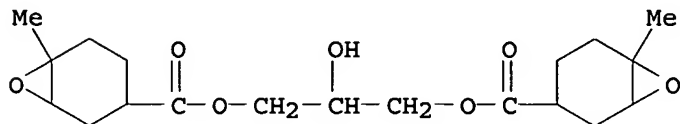
spec. p. 20, EP-12

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)



RN 843651-24-1 REGISTRY  
ED Entered STN: 07 Mar 2005  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
2-hydroxy-1,3-propanediyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C19 H28 O7  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS

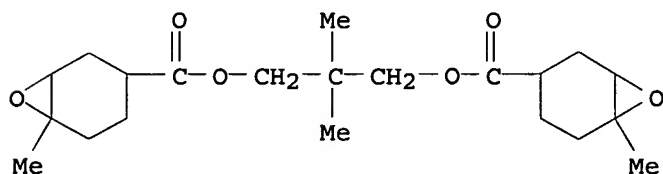


spec. 1 p. 20, EP-16

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-23-4 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 6-methyl-,  
2,2-dimethyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN BA 5903  
FS 3D CONCORD  
MF C21 H32 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

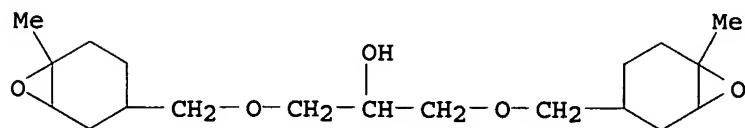


spec. 1p. 20, EP-17

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

15 REFERENCES IN FILE CA (1907 TO DATE)  
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-32-5 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 2-Propanol, 1,3-bis[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methoxy] - (9CI)  
(CA INDEX NAME)  
FS 3D CONCORD  
MF C19 H32 O5  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

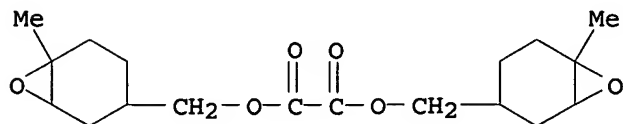


spec., p. 22, (EP-31)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 744910-46-1 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN Ethanedioic acid, bis[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methyl] ester  
(9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C18 H26 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL



spec. p. 22, EP-33

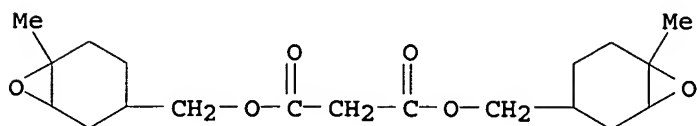
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 847142-10-3 REGISTRY  
ED Entered STN: 24 Mar 2005  
CN Propanedioic acid, bis[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methyl]  
ester, homopolymer (9CI) (CA INDEX NAME)  
MF (C19 H28 O6)x  
CI PMS  
PCT Epoxy resin, Polyester  
SR CA  
LC STN Files: CA, CAPLUS

CM 1

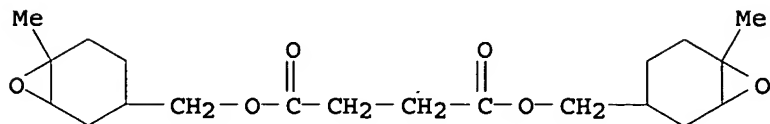
CRN 847142-09-0  
CMF C19 H28 O6



*spec., p. 22, EP-34*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 835611-95-5 REGISTRY  
ED Entered STN: 22 Feb 2005  
CN Butanedioic acid, bis[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methyl] ester  
(9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C20 H30 O6  
CI COM  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER



spec., p. 23, (EP-35)

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

AN 1995:804536 CAPLUS  
 DN 123:200786  
 ED Entered STN: 21 Sep 1995  
 TI Photo-curable resin compositions  
 IN Hasegawa, Junko; Ebisawa, Makoto  
 PA Japan Carlit Co Ltd, Japan  
 SO Jpn. Kokai Tokkyo Koho, 21 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C08F002-50  
 ICS C08G059-68; C08K005-03; C08L083-06; G03F007-029; G03F007-038  
 CC 37-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 35

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07179511	A2	19950718	JP 1993-345712	19931222
PRAI	JP 1993-345712		19931222		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 07179511	ICM	C08F002-50
	ICS	C08G059-68; C08K005-03; C08L083-06; G03F007-029; G03F007-038
	IPCI	C08F0002-50 [ICM,6]; C08G0059-68 [ICS,6]; C08K0005-03 [ICS,6]; C08L0083-06 [ICS,6]; G03F0007-029 [ICS,6]; G03F0007-038 [ICS,6]

OS MARPAT 123:200786

AB Resin compns. useful as coating, adhesive, and sealant are photocurable at room temperature and are characterized by containing  $\geq 2$  di-Ph iodonium salts as photo polymerization initiator, where Ph groups can be substituted by various groups, and cationically polymerizable resins including  $\geq 1$  epoxy resin. A composition containing 100 parts bisphenol A-based epoxy resin and 1 part of a mixture of diphenyliodonium hexafluorophosphate, diphenyliodonium hexafluoroantimonate, diphenyliodonium hexafluoroarsenate, 4,4'-dimethyldiphenyliodonium hexafluoroantimonate, and 4,4'-dibutyldiphenyliodonium hexafluoroantimonate was cured at room temperature in 1.2 s upon UV irradiation

ST polymn initiator photo iodonium; epoxy resin compn

IT Epoxy resins, uses  
 Siloxanes and Silicones, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (photo-curable resin compns.)

IT Epoxy resins, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (bisphenol F-based, photo-curable resin compns.)

IT Acrylic polymers, uses  
 Polyoxyalkylenes, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (epoxy, photo-curable resin compns.)

IT Phenolic resins, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (epoxy, novolak, photo-curable resin compns.)

IT Vinyl acetal polymers  
 RL: POF (Polymer in formulation); USES (Uses)  
 (formals, photo-curable resin compns.)

IT Polyesters, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (hydroxy-containing, photo-curable resin compns.)

IT Onium compounds  
 RL: CAT (Catalyst use); POF (Polymer in formulation); USES (Uses)  
 (iodonium, photo-curable resin compns.)

IT Epoxy resins, uses

RL: POF (Polymer in formulation); USES (Uses)  
(phenolic, novolak, photo-curable resin compns.)

IT Polymerization catalysts  
(photochem., photo-curable resin compns.)

IT Epoxy resins, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polyoxyalkylene-, photo-curable resin compns.)

IT Epoxy resins, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(spiro group-containing, photo-curable resin compns.)

IT 18116-06-8 52754-92-4 58109-40-3 61358-23-4 62613-15-4  
69842-75-7 71786-70-4 95891-09-1 120996-53-4 124150-55-6  
140697-17-2 149759-20-6 167997-54-8 167997-56-0 167997-58-2  
167997-60-6 167997-62-8 167997-64-0 167997-66-2 167997-68-4  
167997-70-8 167997-72-0 167997-74-2 167997-76-4 167997-78-6  
167997-80-0 167997-82-2 167997-84-4 167997-86-6 167997-88-8  
167997-90-2 167997-92-4 167997-93-5 167997-95-7 167997-96-8  
167997-97-9 167997-98-0 167998-00-7 167998-02-9 167998-04-1  
167998-06-3 167998-08-5 167998-10-9 167998-12-1 167998-14-3  
167998-16-5 167998-17-6 167998-18-7 167998-20-1 167998-21-2  
167998-22-3 167998-24-5 167998-25-6 167998-27-8 167998-29-0  
167998-30-3 167998-32-5 167998-34-7 167998-36-9 167998-38-1  
167998-40-5 167998-42-7 167998-44-9

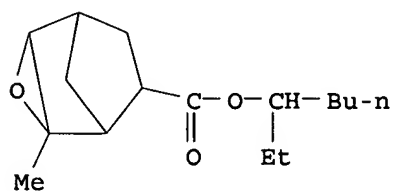
RL: CAT (Catalyst use); POF (Polymer in formulation); USES (Uses)  
(photo-curable resin compns.)

IT 106-86-5, 4-Vinylcyclohexene oxide (1195-92-2) Limonene oxide  
9003-17-2, Polybutadiene 9003-53-6, Polystyrene 24979-97-3,  
Tetrahydrofuran homopolymer 24980-41-4, ε-Caprolactone  
homopolymer 25498-06-0 60098-22-8, Chloromethylstyrene-methyl  
methacrylate copolymer 113654-92-5 167997-52-6 167998-45-0

RL: POF (Polymer in formulation); USES (Uses)  
(photo-curable resin compns.)



RN 744910-84-7 REGISTRY  
ED Entered STN: 15 Sep 2004  
CN 3-Oxatricyclo[3.2.1.0<sup>2,4</sup>]octane-6-carboxylic acid, 4-methyl-,  
1-ethylpentyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C16 H26 O3  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

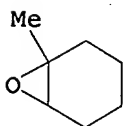


CAPLUS

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

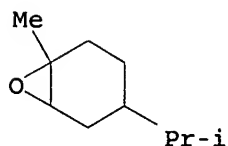
RN 1713-33-3 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 7-Oxabicyclo[4.1.0]heptane, 1-methyl- (6CI, 7CI, 8CI, 9CI) (CA  
 INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 7-Oxabicyclo[4.1.0]heptane, 1-methyl-, (±)-  
 OTHER NAMES:  
 CN (±)-1-Methyl-7-oxabicyclo[4.1.0]heptane  
 CN 1,2-Epoxy-1-methylcyclohexane  
 CN 1-Methyl-1,2-epoxycyclohexane  
 CN 1-Methyl-7-oxabicyclo[4.1.0]heptane  
 CN 1-Methylcyclohexene 1,2-oxide  
 CN 1-Methylcyclohexene epoxide  
 CN 1-Methylcyclohexene oxide  
 CN NSC 12597  
 FS 3D CONCORD  
 DR 60363-27-1, 21451-98-9  
 MF C7 H12 O  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,  
 CHEMINFORMRX, SPECINFO, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

386 REFERENCES IN FILE CA (1907 TO DATE)  
 386 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

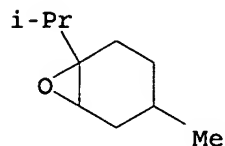
RN 3626-19-5 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 7-Oxabicyclo[4.1.0]heptane, 1-methyl-4-(1-methylethyl)- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN p-Menthane, 1,2-epoxy- (7CI, 8CI)  
 OTHER NAMES:  
 CN Δ<sup>2</sup>-Menthene oxide  
 CN 1-p-Menthene oxide  
 CN Carvomenthene epoxide  
 CN Carvomenthene oxide  
 FS 3D CONCORD  
 DR 22472-49-7  
 MF C10 H18 O  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, SPECINFO,  
 USPATFULL  
 (\*File contains numerically searchable property data)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

34 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 34 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

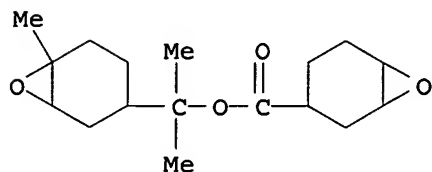
RN 4184-02-5 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 7-Oxabicyclo[4.1.0]heptane, 4-methyl-1-(1-methylethyl)- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN p-Menthane, 3,4-epoxy- (7CI, 8CI)  
 OTHER NAMES:  
 CN 3,4-Epoxy-p-menthane  
 FS 3D CONCORD  
 DR 22472-76-0, 28061-01-0  
 MF C10 H18 O  
 LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, USPATFULL  
 (\*File contains numerically searchable property data)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

26 REFERENCES IN FILE CA (1907 TO DATE)  
 26 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

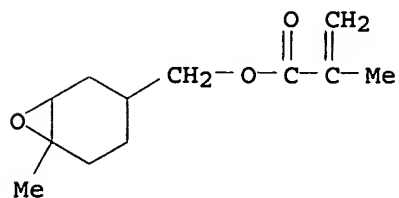
RN 195065-80-6 REGISTRY  
 ED Entered STN: 08 Oct 1997  
 CN 7-Oxabicyclo[4.1.0]heptane-3-carboxylic acid, 1-methyl-1-(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)ethyl ester (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C17 H26 O4  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, CHEMLIST, USPATFULL  
 Other Sources: TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

8 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

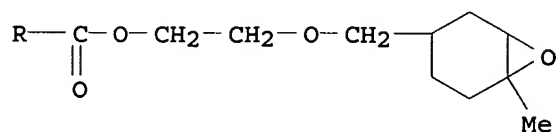
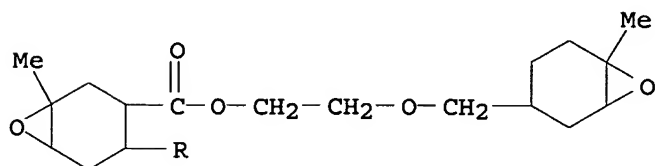
RN 858671-51-9 REGISTRY .  
 ED Entered STN: 07 Aug 2005  
 CN 2-Propenoic acid, 2-methyl-, (6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methyl  
 ester (9CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C12 H18 O3  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 835611-97-7 REGISTRY  
 ED Entered STN: 22 Feb 2005  
 CN 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, 1-methyl-,  
 bis[2-[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methoxy]ethyl] ester (9CI)  
 (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C29 H44 O9  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

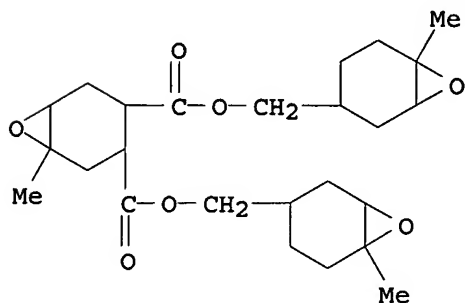
1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 847142-08-9 REGISTRY  
 ED Entered STN: 24 Mar 2005  
 CN 7-Oxabicyclo[4.1.0]heptane-3,4-dicarboxylic acid, 1-methyl-,  
 bis[(6-methyl-7-oxabicyclo[4.1.0]hept-3-yl)methyl] ester, homopolymer  
 (9CI) (CA INDEX NAME)  
 MF (C25 H36 O7)x  
 CI PMS  
 PCT Epoxy resin, Polyester  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

CRN 847142-07-8

CMF C25 H36 O7



1 REFERENCES IN FILE CA (1907 TO DATE)

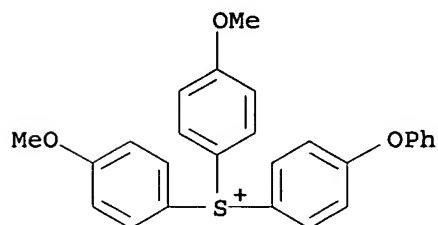
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)



RN 805235-99-8 REGISTRY  
ED Entered STN: 30 Dec 2004  
CN Sulfonium, bis(4-methoxyphenyl) (4-phenoxyphenyl)-,  
hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
MF C26 H23 O3 S . F6 P  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

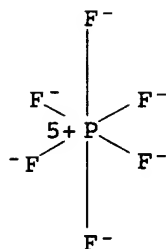
CRN 805235-98-7  
CMF C26 H23 O3 S



spec. 1 p. 71, (SP-2)

CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS

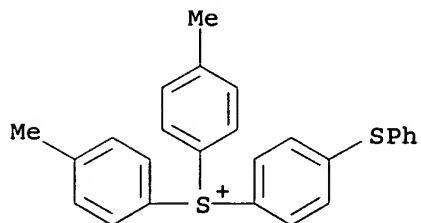


3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 724460-77-9 REGISTRY  
 ED Entered STN: 09 Aug 2004  
 CN Sulfonium, bis(4-methylphenyl) [4-(phenylthio)phenyl]-,  
 hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 MF C26 H23 S2 . F6 P  
 SR CA  
 LC STN Files: CA, CAPLUS

CM 1

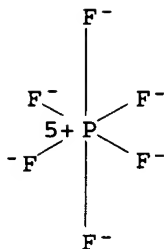
CRN 724460-76-8  
 CMF C26 H23 S2



spec. p. 71, SP-2

CM 2

CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 104558-95-4 REGISTRY  
ED Entered STN: 04 Oct 1986  
CN Cyracure UVI 6990 (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Cyracure 6990  
CN UV 16990  
CN UVI 6990  
DR 232591-76-3  
ENTE A triaryl sulfonium salt; also described as Ph3S.F6P; also as a mixt of  
74227-35-3 and 75482-18-7 (again 11/20/00); also as triphenyldisulfonium  
F6P  
MF Unspecified  
CI PMS, COM, MAN  
PCT Manual registration  
SR CA  
LC STN Files: CA, CAPLUS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

291 REFERENCES IN FILE CA (1907 TO DATE)  
291 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 106220-70-6 REGISTRY  
ED Entered STN: 17 Jan 1987  
CN Sulfonium, (thiodi-4,1-phenylene)bis[bis[4-(2-hydroxyethoxy)phenyl]-,  
bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

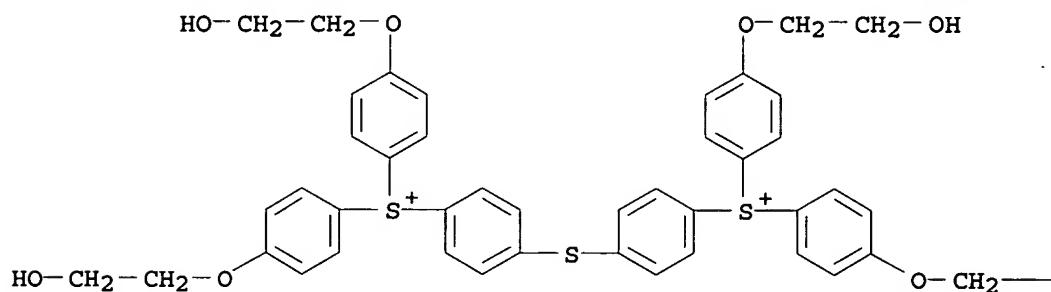
OTHER NAMES:

CN Adeka Optomer SP 150  
CN Optomer SP 150  
CN SP 150  
CN UVI 6950  
DR 161287-76-9  
MF C44 H44 O8 S3 . 2 F6 P  
SR CA  
LC STN Files: CA, CAPLUS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL

CM 1

CRN 106220-69-3  
CMF C44 H44 O8 S3

PAGE 1-A

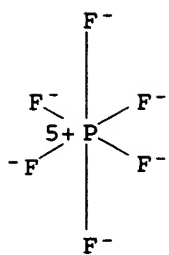


PAGE 1-B

—CH<sub>2</sub>—OH

CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS

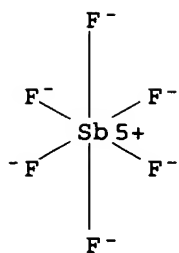


44 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 44 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 205944-57-6 REGISTRY  
ED Entered STN: 27 May 1998  
CN Adeka Optomer SP 152 (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN SP 152  
ENTE A triarylsulfonium hexafluorophosphate photochem. acid generator (Asahi  
Denka Kogyo)  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
54 REFERENCES IN FILE CA (1907 TO DATE)  
54 REFERENCES IN FILE CAPLUS (1907 TO DATE)





312 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 313 REFERENCES IN FILE CAPLUS (1907 TO DATE)



RN 409080-92-8 REGISTRY  
ED Entered STN: 30 Apr 2002  
CN Adeka Optomer SP 172 (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN SP 172  
ENTE A photocationic polymerization initiator (Asahi Denka Kogyo K.K.)  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
21 REFERENCES IN FILE CA (1907 TO DATE)  
21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

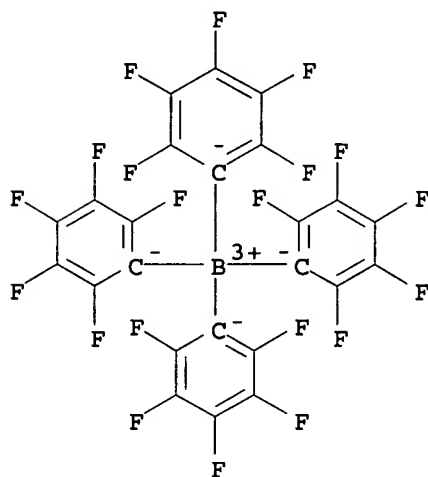
RN 489432-68-0 REGISTRY  
ED Entered STN: 13 Feb 2003  
CN Iodonium, [4-(1-methylethyl)phenyl]phenyl-, tetrakis(pentafluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN RP 2074  
MF C24 B F20 . C15 H16 I  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

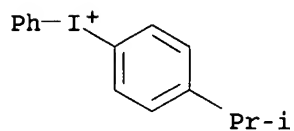
CM 1

CRN 47855-94-7  
CMF C24 B F20  
CCI CCS



CM 2

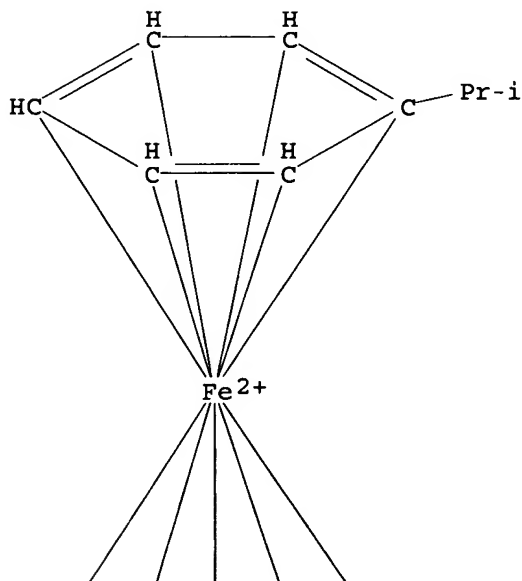
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CMF C15 H16 I

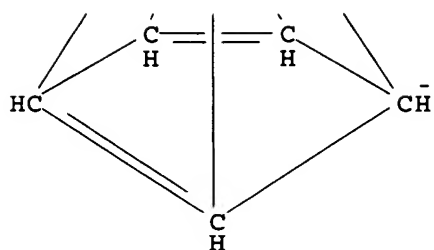


3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 32760-80-8 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Iron(1+), ( $\eta^5$ -2,4-cyclopentadien-1-yl)[(1,2,3,4,5,6- $\eta$ )-(1-methylethyl)benzene]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Benzene, (1-methylethyl)-, iron complex  
 CN Iron(1+), (cumene)- $\pi$ -cyclopentadienyl-, hexafluorophosphate(1-) (8CI)  
 CN Phosphate(1-), hexafluoro-, ( $\eta^5$ -2,4-cyclopentadien-1-yl)[(1,2,3,4,5,6- $\eta$ )-(1-methylethyl)benzene]iron(1+)  
 OTHER NAMES:  
 CN ( $\eta^5$ -2,4-Cyclopentadien-1-yl)[(1,2,3,4,5,6- $\eta$ )-(1-methylethyl)benzene]iron(1+) hexafluorophosphate  
 CN ( $\eta^5$ -2,4-Cyclopentadien-1-yl)[(1,2,3,4,5,6- $\eta$ )-(1-methylethyl)benzene]iron(1+) hexafluorophosphate(1-)  
 CN ( $\eta^5$ -Cyclopentadienyl)( $\eta^6$ -isopropylbenzene)iron(1+) hexafluorophosphate  
 CN ( $\eta^6$ -Cumene)( $\eta^5$ -cyclopentadienyl)iron(II) hexafluorophosphate  
 CN CG 24-61  
 CN CG 261  
 CN I 261  
 CN Irgacure 261  
 CN Irgacure CG 24-61  
 DR 133832-04-9, 114558-86-0, 34978-88-6  
 MF C14 H17 Fe . F6 P  
 CI COM  
 LC STN Files: CA, CAPLUS, CASREACT, CHEMLIST, GMELIN\*, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: NDSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 CM 1  
 CRN 51150-25-5  
 CMF C14 H17 Fe  
 CCI CCS

PAGE 1-A



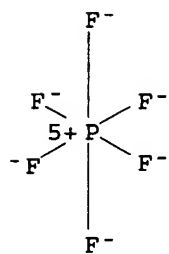


CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

324 REFERENCES IN FILE CA (1907 TO DATE)

325 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 375798-26-8 REGISTRY  
ED Entered STN: 17 Dec 2001  
CN Solsperse 32000 (9CI) (CA INDEX NAME)  
ENTE A dispersant (Avecia Co. Ltd.)  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS, USPATFULL

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
26 REFERENCES IN FILE CA (1907 TO DATE)  
27 REFERENCES IN FILE CAPLUS (1907 TO DATE)

Elected species of  
pigment dispersant  
c1.11